

1 Amendments to the claims:

2
3 4. (Currently amended) A simplified "T" interchange design for
4 ~~an intersection of a four lane expressway with a two lane highway,~~
5 ~~said interchange design~~ comprising:

6 a first road surface with traffic moving in a left to right
7 direction, said first road surface having at least two lanes for
8 traffic moving in said left to right direction;

9 a second road surface for traffic moving in a right to left
10 direction, said second road surface having at least two lanes for
11 traffic moving in said right to left direction;

12 an open space between said first road surface and said second
13 road surface, said open space substantially forming a median;

14 a third road surface for traffic intending to connect onto
15 ~~intersect~~ said first road surface and said second road surface;
16 said third road surface having at least one lane for traffic moving
17 toward said first road surface and said second road surface; said
18 third road surface having at least one lane for traffic moving away
19 from said first road surface and said second road surface; said
20 third road surface having a terminated end that is located within
21 said median between said first road surface and said second road
22 surface;

23 a bridge located on said first road surface substantially
24 where said third road surface intersects said first road surface,
25 said bridge configured so that vehicles traveling on said first

1 road surface pass over said bridge, and above said third road
2 surface; said bridge configured so that vehicles traveling on said
3 third road surface pass under said bridge, and under said first
4 road surface;

5 an exit ramp from said second road surface onto said median ,
6 said exit ramp being connected to said terminated end of
7 connecting onto said third road surface;

8 ~~whereby a "simplified "T" interchange design " is provided~~
9 ~~that provides many benefits; most importantly, all the hazardous~~
10 ~~elements of existing expressway "T" intersections are eliminated,~~
11 ~~the results will be the elimination of all future serious and~~
12 ~~fatal accidents; also, the new "T" interchange design will be very~~
13 ~~safe for vehicles passing through the new interchange from any~~
14 ~~direction as vehicles are never required to cut across lanes of~~
15 ~~high speed traffic when making transitions between the two lane~~
16 ~~highway and the four lane expressway; and any vehicles passing in~~
17 ~~front of one another would at most be traveling at only a few miles~~
18 ~~an hour, thus, any accidents would be minor; additionally, "on~~
19 ~~ramps" and "off ramps" can be provided so that vehicle making~~
20 ~~transitions are able to get up to speed before merging with high~~
21 ~~speed traffic; also, the new simplified interchange design will not~~
22 ~~be confusing for vehicles passing through the interchange from any~~
23 ~~direction even if the interchange is built on a curving expressway,~~
24 ~~and the interchange would very inexpensive to build when compared~~

1 ~~to the cost to build a conventional interchange, as the simplified~~
2 ~~design for a "T" interchange can built for approximately 20% to~~
3 ~~25% of the cost of a traditional interstate interchange thereby~~
4 ~~saving government transportation departments millions of dollars,~~
5 ~~additionally, the simplified "T" interchange design may only take~~
6 ~~up 20% to 25% of the space of a conventional expressway freeway~~
7 ~~interchange, thereby saving money and land for other uses.~~

8
9 5. (Currently amended) The simplified "T" interchange design
10 of claim 4 including an on ramp connecting from said terminated end
11 of said third road surface, passing through said median, and
12 connecting onto said second road surface.

13
14 6. (Currently amended) A simplified "T" interchange design ~~for~~
15 ~~an intersection of a four lane expressway with a two lane highway,~~
16 ~~said interchange design~~ comprising:

17 a first road surface with traffic moving in a left to right
18 direction, said first road surface having at least two lanes for
19 traffic moving in the left to right direction;

20 a second road surface for traffic moving in a right to left
21 direction, said second road surface having at least two lanes for
22 traffic moving in the right to left direction;

23 an open space between said first road surface and said second
24 road surface, said open space substantially forming a median;

1 a third road surface for traffic intending to connect onto
2 ~~intersect~~ said first road surface and said second road surface;
3 said third road surface having at least one lane for traffic moving
4 toward said first road surface and said second road surface; said
5 third road surface having at least one lane for traffic moving away
6 from said first road surface and said second road surface; said
7 third road surface having a terminated end that is located within
8 said median between said first road surface and said second road
9 surface;

10 a bridge located on said third road surface substantially
11 where said third road surface intersects said first road surface,
12 said bridge configured so that vehicles traveling on said first
13 road surface pass under said bridge, and, under said third road
14 surface, said bridge configured so that vehicles traveling on said
15 third road surface pass over said bridge, and over said first road
16 surface;

17 ~~whereby a "simplified "T" interchange design " is provided~~
18 ~~that provides many benefits; most importantly, all the hazardous~~
19 ~~elements of existing expressway "T" intersections are eliminated,~~
20 ~~the results will be the elimination of all future serious and~~
21 ~~fatal accidents; also, the new "T" interchange design will be very~~
22 ~~safe for vehicles passing through the new interchange from any~~
23 ~~direction as vehicles are never required to cut across lanes of~~
24 ~~high speed traffic when making transitions between the two lane~~

1 ~~highway and the four lane expressway; and any vehicles passing in~~
2 ~~front of one another would at most be traveling at only a few miles~~
3 ~~an hour, thus, any accidents would be minor; additionally, "on~~
4 ~~ramps" and "off ramps" can be provided so that vehicle making~~
5 ~~transitions are able to get up to speed before merging with high~~
6 ~~speed traffic; also, the new simplified interchange design will not~~
7 ~~be confusing for vehicles passing through the interchange from any~~
8 ~~direction even if the interchange is built on a curving expressway,~~
9 ~~and the interchange would very inexpensive to build when compared~~
10 ~~to the cost to build a conventional interchange, as the simplified~~
11 ~~design for a "T" interchange can built for approximately 20% to~~
12 ~~25% of the cost of a traditional interstate interchange thereby~~
13 ~~saving government transportation departments millions of dollars,~~
14 ~~additionally, the simplified "T" interchange design may only take~~
15 ~~up 20% to 25% of the space of a conventional expressway freeway~~
16 ~~interchange, thereby saving money and land for other uses.~~

17
18 7. (Previously presented) The simplified "T" interchange design of
19 claim 6 including an exit ramp from said first road surface
20 connecting onto said third road surface.

21
22 8. (Previously presented) The simplified "T" interchange design of
23 claim 6 including an exit ramp from said third road surface
24 connecting onto said first road surface.

1 9. (Currently amended) The simplified "T" interchange design of
2 claim 6 including an exit ramp from said second road surface onto
3 said median, said exit ramp connecting onto said terminated end of
4 said third road surface.

5
6 10. (Currently amended) The simplified "T" interchange design of
7 claim 6 including an on ramp connecting from said terminated end
8 of said third road surface, passing through said median, and
9 connecting onto said second road surface.

10
11 11. (Currently amended) A simplified "T" interchange design for an
12 intersection of a four lane expressway with a two lane highway,
13 said interchange design comprising:

14 a first road surface with traffic moving in a left to right
15 direction, said first road surface having at least two lanes for
16 traffic moving in said left to right direction,

17 a second road surface for traffic moving in a right to left
18 direction, said second road surface having at least two lanes for
19 traffic moving in said right to left direction ,

20 an open space between said first road surface and said second
21 road surface, said open space substantially forming a median;

22 a third road surface for traffic intending to connect onto
23 ~~intersect~~ said first road surface and said second road surface;
24 said third road surface having at least one lane for traffic moving

1 toward said first road surface and said second road surface; said
2 third road surface having at least one lane for traffic moving away
3 from said first road surface and said second road surface; said
4 third road surface having a terminated end that is located within
5 said median between said first road surface and said second road
6 surface;

7 a bridge located on said first road surface substantially
8 where said third road surface intersects said first road surface,
9 said bridge configured so that vehicles traveling on said first
10 road surface pass over said bridge, and over said third road
11 surface; said bridge configured so that vehicles traveling on said
12 third road surface pass under said bridge, and under said first
13 road surface;

14 an exit ramp from said second road surface onto said median ,
15 said exit ramp connecting onto said terminated end of said third
16 road surface;

17 an on ramp connecting from said terminated end of said third
18 road surface, passing through said median, and connecting onto said
19 second road surface;

20 ~~whereby a "simplified "T" interchange design " is provided~~
21 ~~that provides many benefits; most importantly, all the hazardous~~
22 ~~elements of existing expressway "T" intersections are eliminated,~~
23 ~~the results will be the elimination of all future serious and~~
24 ~~fatal accidents; also, the new "T" interchange design will be very~~

1 ~~safe for vehicles passing through the new interchange from any~~
2 ~~direction as vehicles are never required to cut across lanes of~~
3 ~~high speed traffic when making transitions between the two lane~~
4 ~~highway and the four lane expressway; and any vehicles passing in~~
5 ~~front of one another would at most be traveling at only a few miles~~
6 ~~an hour, thus, any accidents would be minor; additionally, "on~~
7 ~~ramps" and "off ramps" can be provided so that vehicle making~~
8 ~~transitions are able to get up to speed before merging with high~~
9 ~~speed traffic; also, the new simplified interchange design will not~~
10 ~~be confusing for vehicles passing through the interchange from any~~
11 ~~direction even if the interchange is built on a curving expressway,~~
12 ~~and the interchange would very inexpensive to build when compared~~
13 ~~to the cost to build a conventional interchange, as the simplified~~
14 ~~design for a "T" interchange can built for approximately 20% to~~
15 ~~25% of the cost of a traditional interstate interchange thereby~~
16 ~~saving government transportation departments millions of dollars,~~
17 ~~additionally, the simplified "T" interchange design may only take~~
18 ~~up 20% to 25% of the space of a conventional expressway freeway~~
19 ~~interchange, thereby saving money and land for other uses.~~

20
21 12. (Previously presented) The simplified "T" interchange design of
22 claim 11 including an exit ramp from said first road surface
23 connecting onto said third road surface.

1 13. (Previously presented) The simplified "T" interchange design of
2 claim 11 including an exit ramp from said third road surface
3 connecting onto said first road surface.

4
5 14. (Currently amended) The simplified "T" interchange design of
6 claim 11 including a traffic signal ,or stop sign located at ~~the~~
7 said terminated end of said third road surface substantially where
8 said third road surface meets said exit ramp of said second road
9 surface.

10
11 15. (Currently amended) The simplified "T" interchange design of
12 claim 11 including a traffic signal ,or stop sign located ~~at the~~
13 ~~end of said exit ramp~~ substantially where said exit ramp from said
14 second road surface meets said terminated end of said third road
15 surface.

16
17 16. (Canceled)

18
19 17. (Previously presented) The simplified "T" interchange design of
20 claim 11 including an "up ramp" on said first surface originating
21 at the ground level of said interchange location, said "up ramp"
22 rising to meet the top of said bridge; and, a "down ramp"
23 originating at said top of said bridge, said "down ramp"
24 terminating at said ground level of said interchange location.

1 18. (Currently amended) The simplified "T" interchange design of
2 claim 11 wherein said bridge is an arched bridge with Brownstone
3 color & texture that is similar to native brownstone located
4 Bayfield County Wisconsin;

5 thereby providing a design that would ~~be very attractive and~~
6 ~~could be a land mark and could be referred to as~~ "a gateway" to the
7 local national park and Apostle Islands; additionally an arched
8 brownstone bridge could be designed to look as if it were built
9 hundreds or even a thousand years ago similar to Roman Bridges
10 built in Europe more than a thousand years ago; alternately other
11 locations could have bridge designs with stone looks that are
12 native to their locations.

13
14 19. (Canceled)

15 20. (canceled)

16
17 21. (Currently amended) The simplified "T" interchange design of
18 claim 4 including a traffic signal ,or stop sign located at said
19 terminated ~~the~~ end of said third road surface substantially where
20 said terminated end of said third road surface meets said exit ramp
21 of said second road surface.

22
23 22. (Currently amended) The simplified "T" interchange design of
24 claim 4 including a traffic signal ,or stop sign located ~~at the~~

1 ~~end of said exit ramp~~ substantially where said exit ramp from said
2 second road surface meets said terminated end of said third road
3 surface.

4
5 23. (Previously presented) The simplified "T" interchange design of
6 claim 4 including an exit ramp from said first road surface
7 connecting onto said third road surface.

8
9 24. (Previously presented) The simplified "T" interchange design of
10 claim 4 including an exit ramp from said third road surface
11 connecting onto said first road surface.

12
13 25. (Previously presented) The simplified "T" interchange design of
14 claim 4 including an "up ramp" on said first surface originating at
15 the ground level of said interchange location, said "up ramp"
16 rising to meet the top of said bridge; and, a "down ramp"
17 originating at said top of said bridge, said "down ramp"
18 terminating at said ground level of said interchange location.

19
20 26. (Currently amended) The simplified "T" interchange design of
21 claim 6 including a traffic signal ,or stop sign located at the end
22 of said third road surface substantially where said terminated end
23 of said third road surface meets said exit ramp of said second road
24 surface; and

1 a traffic signal ,or stop sign located at the end of said exit
2 ramp from said second road surface substantially where said exit
3 ramp from said second road surface meets said terminated end of
4 said third road surface.

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